I. GENERAL: FIBER OPTIC TRUNK: UNLESS OTHERWISE SPECIFIED ON THE PLANS, THE INSTALLATION OF ITS DEVICES, CONDUITS, PULL BOXES SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT ITS DESIGN MANUAL, REVISION 10/29/2013, NAV-01-176 AND PER THE GDOT P.I. 110600 DESIGN-BUILD AGREEMENT. UNLESS OTHERWISE SPECIFIED ON THE PLANS ALL FIBERS RELATED TO F/O TRUNK AND F/O DROP CABLE SHALL BE OUTSIDE PLANT (OSP). SINGLE-MODE FIBER. UNLESS OTHERWISE SPECIFIED THE ELECTRONIC TRANSACTION CONSULTANTS (ETC) SHALL BE RESPONSIBLE FOR INSTALLATION AND INTEGRATION OF STATE ROADWAY AND TOLL AUTHORITY (SRTA) OWNED ITS DEVICES, TOLL DEVICES, AND ASSOCIATED NETWORK SWITCHES AND UNLESS OTHERWISE SPECIFIED ON THE PLANS ALL F/O CABLE FOR SRTA USE IS TO BE NEW. III) TRANSPORTATION MANAGEMENT CENTER (TMC) IMPROVEMENTS SHALL BE MANAGED BY GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) AND ALL FIBER DISTRIBUTION CENTERS (FDC) USED IN THIS PROJECT SHALL BE RACK MOUNTED FDC UNITS. IMPLEMENTED BY THE TRANSPORTATION MANAGEMENT CENTER INTEGRATOR (TMC SI). THE DESIGN BUILD TEAM SHALL INSTALL THE CIVIL INFRASTRUCTURE WITHIN THE PROJECT LIMITS FOR ETC AND TMC SI TO COMPLETE THEIR CABINETS: INSTALLATION AND INTEGRATION. UNLESS OTHERWISE SPECIFIED ON THE PLANS THE FOLLOWING CABINET TYPES SHALL BE USED UNDER THIS PROJECT: GROUND MOUNTED GOOT CABINETS TYPE C MODEL 332 SHALL BE USED AT ALL WALK-IN CMS LOCATIONS. GROUND MOUNTED GOOT CABINETS TYPE C MODEL 336S SHALL BE USE AT OTHER ITS LOCATIONS AS NOTED ON THE PLANS. COMMUNICATION AND NETWORK BACKBONE: POLE MOUNTED GDOT CABINES SHALL BE TP-D MODEL 336S FIBER OPTIC (F/O) NETWORK SHALL BE DESIGNED ALONG THE GENERAL PURPOSE LANES AS SHOWN ON THE ITS PLAN SHEETS. SRTA GROUND MOUNTED CABINETS SHALL BE TP-C MODEL 332 SRTA POLE MOUNTED CABINETS SHALL BE TP-A MODEL 336S ALL FIBERS INSTALLED UNDER THIS PROJECT SHALL BE TERMINATED AT COMMUNICATION HUBS OR AT THE TERMINATION POINTS AS DESIGNATED ON THE ITS PLANS. III) EACH CABINET SHALL ACCOMMODATE IOFT OF F/O DROP CABLE COILED BUNDLED AND LABELED INSIDE THE CABINET. III) THE MAXIMUM NUMBER OF FIELD DEVICES WHICH CAN BE ACCOMMODATED ON A FIELD DEVICE DAISY CHAIN SHALL NOT EXCEED 8 FIELD SWITCH CABINET LOCATIONS OR 6 CCTV, WHICHEVER IS REACHED FIRST. PROPOSED GDOT ITS DEVICES AND EXISTING GDOT ITS DEVICES SHALL NOT BE ASSIGNED WITHIN THE SAME NETWORK PATH OR OTHERWISE UNINTERRUPTABLE POWER SUPPLY (UPS): DAISY-CHAINED TO AVOID POSSIBLE INCONSISTENCIES IN COMMUNICATION PROTOCOLS. UPS FOR COMMUNICATION HUB BUILDING SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF SPECIAL PROVISION 939. THE SRTA OWNED F/O TRUNK CABLE SHALL CONTAIN EITHER 72 OR 144 COUNT NEW SINGLE-MODE FIBERS IN SEPARATE CONDUITS AS SPECIFIED ON THE PLANS. 11) THE UPS FOR SRTA ITS CABINETS SHALL BE PROVIDED BY ETC PER THE RFP REQUIREMENTS SECTION 21.1.3. COORDINATION WITH OTHER DESIGN ELEMENTS (TO BE SUBMITTED AT A LATER DATE FOR REVIEW): CONDUITS & DUCT BANKS : THE ELECTRICAL DESIGN PLANS SHALL BE REFERRED FOR THE ELECTRICAL SERVICE POINT LOCATIONS, POWER CONDUIT LAYOUT, POWER SERVICE AT EXPOSED CONDUIT LOCATIONS ON BRIDGES, FIBERGLASS CONDUITS SHALL BE USED. AT ALL OTHER EXPOSED CONDUIT LOCATIONS, GALVANIZED ASSEMBLY DESIGN DETAILS AND, GROUNDING DETAILS. RIGID STEEL CONDUIT SHALL BE USED. 11) THE FIBER ALLOCATION DETAILS FOR GDOT'S ITS DEVICES AND COMMUNICATION HUBS SHALL BE PROVIDED BY GDOT. NEW CONDUIT DUCT BANKS SHALL BE INSTALLED APPROXIMATELY TEN (10) FEET INSIDE THE EXISTING INTERSTATE RIGHT-OF-WAY WHERE FEASIBLE, WHERE VEGETATION OR OTHER OBSTRUCTIONS HINDER INSTALLATION OF THE DUCT BANKS APPROXIMATELY TEN (10) FEET FROM THE 111) THE FIBER ALLOCATION DETAILS FOR SRTA'S ITS DEVICES AND COMMUNICATION HUBS SHALL BE PROVIDED BY SRTA. RIGHT-OF-WAY LINE. THE DUCT BANKS LOCATION SHALL BE PRE-APPROVED BY GDOT PRIOR TO THE INSTALLATION. 111) UNLESS OTHERWISE SPECIFIED ON THE PLANS, CONDUIT DUCT BANKS SHALL BE INSTALLED BY DIRECTIONAL BORING. THE ITS PLAN SHEETS DO NOT SHOW EACH CONDUIT RUN BETWEEN THE ITS DEVICES AND THE CABINETS TO MAINTAIN CLARITY. THE STANDARDS ITS DETAILS AND THE SPECIAL ITS DETAILS SHALL DE REFERRED TO FOR TYPICAL CONDUIT INSTALLATIONS AT THE BASE OF ITS DEVICE STRUCTURES AND THE CABINETS. ALL CONDUIT. CONDUIT ACCESS PULL BOXES, FIBER AND COMMUNICATION CABLING, CABINETS, PATCH PANELS, NETWORK SWITCHES AND TERMINAL SERVERS SHALL BE SOLELY DEDICATED EITHER TO THE GDOT OR THE SRTA NETWORK. ALL SRTA FIBER-OPTIC DUCT BANKS SHALL BE INSTALLED USING USING GDOT OWNED PULL BOXES/ECBS. vi) FOR NEW DUCT BANKS, TWO (2) CONDUITS SHALL BE DEDICATED FOR SRTA'S USE AND DENOTED BY COLORING AS BEING SRTA'S CONDUIT. 4. PULL BOXES: FOR FREEWAY OR ARTERIAL INSTALLATIONS, A TYPE 7 PULL BOX SHALL BE USED FOR THE INSTALLATION OF CONDUIT DUCT BANKS. 11) TYPE 4S PB SHALL BE USED AT THE BASE OF ITS DEVICE POLES/STRUCTURES. III) EACH TYPE 7 PULL BOX WITH FIBER OPTIC (F/O) TRUNK SHALL CONTAIN A SLACK F/O CABLE COIL OF IIO FT. IV) EACH PULL BOX CONTAINING A F/O DROP CABLE AND ACCOMMODATING A SPLICE ENCLOSURE SHALL CONTAIN A SLACK F/O CABLE OF 55 FT. REVISION DATES STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION PARCADIS Design & Consultre for natural and built assets OFFICE: INNOVATIVE DELIVERY **RELEASE** GENERAL NOTES FOR CONSTRUCTION 07/27/2016 PROJECT: 1-85 NORTH EXPRESS LANE EXTENSION COUNTY: GWINNETT

NOTES- ITS PLANS

COUNTY

GWINNET

PROJECT NUMBER

NH1M0-0085-02(164

SHEET NO

TOTAL SHEETS

\TRA\64075 - I-85 HOT Lanes DB\RDY\DGN\II0600_04.dar

7/27/2016

ISER: ilain

10.58.11 AM

Jversion

plotborder-V81-PO_LIGHT WEIGHTS(I), tb